FLUX SENSING SYSTEM

FIELD OF THE INVENTION

[0001] This invention relates generally to robotic devices, including communicatively coupled devices which use variable semantic coherent inferences to allow the devices to perform semantic augmentation

BACKGROUND OF THE INVENTION

[0002] There are many cases in which physical devices are used in a variety of settings involving groups of people and/or objects, such as in the formation of posts and lines to demark crowd control areas or permitted pathways for movement. These provide regions which may be fluid, and tend to require manpower to continually reconfigure them. The posts themselves provide opportunities for gathering/inferring/presenting/rendering/conveying information which may be optical, visual, or otherwise. Robotic devices of this sort may serve a variety of purposes in both gathering/inferring/presenting/rendering/conveying information and demarking areas.

SUMMARY OF THE INVENTION

[0003] A preferred robotic semantic system may include one or more smart posts each having a base (which may optionally include a plurality of wheels or casters in the case of a mobile smart post), a power section, a trunk section, a structure fixation and manipulation portion, a control section, a clipping area, a portion supporting one or more antennas, and an optical sensor portion. Other modules may be incorporated with such smart posts including a copter module (e.g. for aerial transportation) and a display module (e.g. for providing semantic augmentation).

[0004] In one example of the invention, the smart post includes all or a subset of the components listed above in a manner in which they are integrated into a generally unified structure, such as a single pole or post having a hollow center and in which the listed components are attached or inserted into the post. In other versions, the components described above are generally assembled separately, such that they are produced as modules which are joined together to form the post. Thus, each of the above sections or regions or portions may be separately formed modules which are joined together, or may be separate portions of a unitary post or similar structure. In the discussion which follows, for the sake of simplicity each of the foregoing will be referred to as a module; it should be understood, however, that the same description applies to other embodiments in which the module is a portion or section of the smart post, and not necessarily a discrete module. It is to be understood that the post may use any number of modules of any type. In an example, a post may comprise multiple power modules and/or multiple antenna elements modules and/or multiple cameras modules.

[0005] One example of the invention includes a semantic robotic system comprising a plurality of communicatively coupled devices which use a plurality of semantic routes and rules and variable semantic coherent inferences based on such routes and rules to allow the devices to perform semantic augmentation.

[0006] In some versions, the devices comprise semantic posts.

[0007] In some preferred versions, the devices comprise autonomous robotic carriers.

[0008] In some examples of the invention, the devices comprise semantic composable modules.

[0009] In preferred versions of the invention, the devices comprise semantic units.

[0010] In some versions, the semantic system includes a semantic gate.

[0011] In some examples, the semantic system comprises a semantic cyber unit.

[0012] In a preferred implementation of the invention, the semantic posts implement crowd control.

[0013] In one example, the semantic posts implement guiding lanes.

[0014] In some examples, the semantic units perform signal conditioning.

[0015] In some versions of the invention, the signal conditioning is based on semantic wave conditioning, preferably based on semantic gating.

[0016] In some examples, the system performs video processing.

[0017] In some examples of the invention, the system performs semantic augmentation on video artifacts.

[0018] In preferred versions, the system may form semantic groups of posts and physically connect them through physical movement of the semantic posts motor components.

[0019] Preferably, the system uses concern factors in order to determine coherent inferences.

[0020] In some examples, the system forms a semantic group based on semantic resonance.

[0021] Preferably, the system invalidates a semantic group based on semantic decoherence.

[0022] In some examples, the system performs semantic learning based on the inference of semantic resonance.

[0023] In some versions, the system performs semantic learning based on the inference of semantic decoherence.

[0024] Preferably, the system learns semantic rules based on semantic resonance.

[0025] In preferred versions, the system learns damping factor rules. Preferably, the system learns semantic gating rules.

[0026] In some examples, the system learns a hysteresis factor based on semantic analysis.

[0027] In preferred versions, the system performs semantic augmentation using a variety of augmentation modalities.

[0028] In some examples, the system performs semantic augmentation comprising semantic displaying. Preferably, the system performs semantic augmentation on particular devices based on ad-hoc semantic coupling.

[0029] In some examples, the system performs semantic augmentation based on challenges and/or inputs.

[0030] In some examples, the system performs semantic encryption.

[0031] In some examples, the system performs semantic gating based on semantic inferences related to at least one video frame.

[0032] In preferred versions, the system uses semantic groups to form composite carriers.

[0033] In some examples, the devices comprise semantic meshes.

[0034] In some cases, the devices comprise biological sensors. In preferred examples, the biological sensors comprise at least one medical imaging sensor.